

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-25 (canceled)

Claim 26 (currently amended): A mobile information processor, comprising:

a communication means for performing data communication with an external apparatus;

a storage means for storing ~~mobile directory information including information of nearby~~ apparatuses; and

a controller means for collecting information of accessible nearby apparatuses and ~~updating the mobile directory information stored~~ storing the information in the storage means ~~based on the collected information.~~

Claim 27 (currently amended): A mobile information processor according to Claim 26, wherein the controller means receives the information of the nearby apparatuses from a space directory which stores the information of the nearby apparatuses, and updates ~~the mobile directory information of nearby apparatuses~~ stored in the storage means.

Claim 28 (previously presented): A mobile information processor according to Claim 26, wherein the controller means receives the information of the nearby apparatuses from a space directory which stores the information of the nearby apparatuses, while, in response to a transmission challenge from the space directory, the controller means transmits encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory.

Claim 29 (previously presented): A mobile information processor according to Claim 26, wherein the communication means perform Bluetooth wireless communication.

Claim 30 (previously presented): A mobile information processor according to Claim 26, wherein the controller means periodically collects the information of the accessible nearby apparatuses.

Claim 31 (currently amended): A mobile information processor according to Claim 26, wherein the controller means communicates with a personal directory which stores original data of information of nearby apparatuses ~~the mobile directory information~~ through a communication relay included in the nearby apparatuses, and registers a position of the mobile information processor in the personal directory.

Claim 32 (currently amended): An information processor, comprising:
a communication means for performing data communication with an external apparatus;
storage means for storing original information of nearby apparatuses ~~mobile directory information~~; and
a controller means for receiving a service request from the external apparatus through the communication means and providing at least part of the original information as ~~mobile directory information~~ nearby apparatus information to the external apparatus.

Claim 33 (previously presented): An information processor according to Claim 32, wherein the controller means registers position information of the external apparatus.

Claim 34 (previously presented): An information processor, comprising:
a communication means for performing data communication with an external apparatus;
a storage means for storing information of information processors in a local area; and
a controller means for receiving a service request from the external apparatus through the communication means and providing a service to the external apparatus based on the information of the information processors.

Claim 35 (previously presented): An information processor according to Claim 34, wherein the controller means transmits the information of the information processors about nearby apparatuses stored in the storage means to the external apparatus.

Claim 36 (previously presented): An information processor according to Claim 34, wherein, before transmitting the information of the information processors about nearby apparatuses stored in the storage means to the external apparatus, the controller means performs authentication processing by challenge response, wherein the controller means performs challenge transmission and receives encrypted data of the challenge transmission created by a secret key of the external apparatus and a public-key certificate as a response from the external apparatus.

Claim 37 (previously presented): An information processor according to Claim 34, wherein the communication means perform Bluetooth wireless communication.

Claim 38 (currently amended): A data communication system, comprising:
a mobile apparatus storing information of nearby apparatuses~~mobile directory~~
~~information~~; and

a personal directory which stores original information of the nearby apparatuses ~~mobile directory information~~ and receives a service request from the mobile apparatus through a network and provides a service to the mobile apparatus according to the service request.

Claim 39 (previously presented): A data communication system according to Claim 38, further comprising a service provider, wherein the service provider provides a service based on information obtained from the personal directory.

Claim 40 (currently amended): A data communication system according to Claim 38, further comprising a space directory server which stores information of information processors in a local area, wherein the space directory server receives a service request including

information of nearby apparatuses ~~included in the mobile directory information~~ from the mobile apparatus and provides a service through the nearby apparatus.

Claim 41 (previously presented): A data communication system according to Claim 40, wherein the service providing process is performed through a service provider.

Claim 42 (currently amended): A method of obtaining information of nearby apparatuses by using a mobile information processor, the method comprising:

accessing a space directory which stores the information of the nearby apparatuses;
transmitting, in response to a transmission challenge from the space directory, encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory;

receiving the information of the nearby apparatuses from the space directory; and
storing the received information in a storage means ~~as mobile directory information~~.

Claim 43 (currently amended): A method according to Claim 42, further comprising communicating with a personal directory, which stores original data of the information of nearby apparatuses ~~mobile directory information~~, so as to register position information of the mobile information processor in the personal directory.

Claim 44 (currently amended): A data communication method, comprising:
obtaining information of nearby apparatuses as information of information processors in a local area and storing the obtained information in a storage means ~~as mobile directory information~~, the step of obtaining being performed by a mobile apparatus; and

transmitting a service request including the information of the nearby apparatuses ~~included in the mobile directory information~~ from the mobile apparatus to a personal directory, which stores original data of the information of nearby apparatuses ~~mobile directory information~~, so that the personal directory provides a service through the nearby apparatus.

Claim 45 (previously presented): A data communication method according to Claim 44, wherein the information of the nearby apparatuses is obtained from a space directory server which stores the information of information processors as nearby apparatuses.

Claim 46 (previously presented): A data communication method according to Claim 44, wherein the service request is transmitted through a service provider.

Claim 47 (currently amended): A data communication method, comprising:
obtaining information of nearby apparatuses as information of information processors in a local area directly from the information processor and storing the obtained information in a storage means ~~as mobile directory information~~, the step of obtaining being performed by a mobile apparatus; and

receiving a service request including the information of the nearby apparatuses ~~included in the mobile directory information~~ from the mobile apparatus, the step of receiving being performed by a personal directory which stores original data of the information of nearby apparatuses ~~mobile directory information~~ so that the personal directory provides a service through the nearby apparatus.

Claim 48 (previously presented): A data communication method according to Claim 47, wherein the service request is received through a service provider.

Claim 49 (currently amended): A computer program product embodied in a computer readable medium storing a program for enabling a mobile information processor to execute a process of obtaining information of nearby apparatuses, comprising:

a step of accessing a space directory which stores the information of the nearby apparatuses;

a step of transmitting, in response to a transmission challenge from the space directory, encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory;

a step of receiving the information of the nearby apparatuses from the space directory;
and

a step of storing the received information in a storage means ~~as mobile directory information~~.

Claim 50 (currently amended): A computer program product embodied in a computer readable medium storing a program for enabling a mobile information processor to execute a process of obtaining information of nearby apparatuses, comprising:

a step of accessing an information processor which stores apparatus information;

a step of transmitting, in response to a transmission challenge from the information processor, encrypted data of the challenge created by its own secret key together with a public-key certificate to the information processor;

a step of receiving the apparatus information from the information processor; and

a step of storing the received information in a storage means ~~as mobile directory information~~.

Claim 51 (new): A mobile information processor according to Claim 26, further comprising:

an acquisition means for acquiring user information of said processor based on said information of at least one of the nearby apparatuses; and

a request means for requesting a communication service to a service provider based on the acquired user information.

Claim 52 (new): A mobile information processor according to Claim 51, further comprising:

a utilization means for utilizing said communication service based on a determination of whether or not said communication service can be provided by said service provider, wherein the determination is based on said user information.

Claim 53 (new): A mobile information processor according to Claim 51, wherein said acquisition means acquires said user information based on an ID of said processor.

Claim 54 (new): A mobile information processor according to Claim 51, wherein said nearby apparatuses include a nearby access point.